

### ABSTRACT OF THE DISCLOSURE

A method and apparatus for rate control adjusts or otherwise requests adjustment of a communication link data rate based on transmit queuing delays. For example, a mobile station may monitor expected transmit queuing delays relative to one or more delay targets or other Quality-of-Service constraints, and request reverse link rate increases or decreases accordingly. Similarly, the mobile station may be configured periodically to request reverse link rate changes based on determining the rate needed to meet targeted queuing delays for one or more service instances being supported by the mobile station in each of a succession of ongoing rate control intervals. Requested rates may be defined data rates or may be virtual rates that can be achieved by using combinations of defined data rates. Queuing-based rate control also can be applied to the base station's forward link, and, more broadly, to essentially any rate controlled communication link.